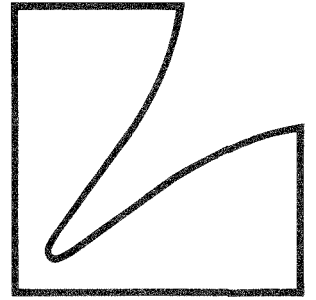
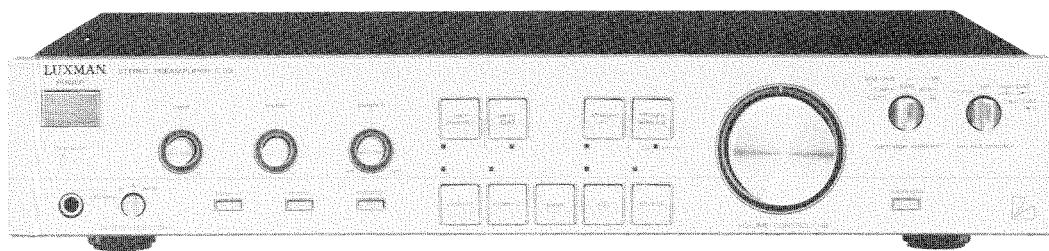


SERVICE MANUAL



Stereo Preamplifier

C-03



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Specifications

| | |
|---|--|
| Output Voltage | 1V |
| Input Sensitivity (at 1kHz) | CD : 150mV \pm 15% |
| | Tuner : 150mV \pm 15% |
| | Phono (MM) 47k ohm, Cap-1 : 2.5V \pm 15% |
| | Phono (MM) 47k ohm, Cap-2 : 2.5V \pm 15% |
| | Phono (MC) 3 ohm : 0.1mV \pm 15% |
| | Phono (MC) 40 ohm : 0.22mV \pm 15% |
| | Phono (MC) 100 ohm : 0.22mV \pm 15% |
| | Monitor-1, 2 (Tape/DAT) : 150mV \pm 15% |
| | Video-1, 2 : 150mV \pm 15% |
| Input Impedance (at 1kHz) | CD : 32k ohm \pm 20% |
| | Tuner : 32k ohm \pm 20% |
| | Phono (MM) 47k ohm, Cap-1 : 47k ohm \pm 20% |
| | Phono (MM) 47k ohm, Cap-2 : 47k ohm \pm 20% |
| | Phono (MC) 3 ohm : 120 ohm \pm 20% |
| | Phono (MC) 40 ohm : 40 ohm \pm 20% |
| | Phono (MC) 100 ohm : 100 ohm \pm 20% |
| | Monitor-1, 2 (Tape/DAT) : 32k ohm \pm 20% |
| | Video-1, 2 : 32k ohm \pm 20% |
| Total Harmonic Distortion (at 1kHz) | CD, Tuner (Pre-Out : 2V) : 0.01% |
| | Phono (MM) (Rec-Out : 5V) : 0.01% |
| | Video-1, 2 (Pre-Out : 2V) : 0.01% |
| Frequency Response | CD, Tuner 20~100kHz : \pm 1.5dB |
| | Phono (MM) (Rec-Out 1V) 100Hz : \pm 0.5dB |
| | 10kHz : \pm 0.5dB |
| | Video-1, 2 20~100kHz \pm 0.5dB |
| | Tape Monitor-1, 2 (DAT/Monitor-1, 2) 20~100kHz : \pm 1.5dB |
| | Video, Monitor-1, 2 20~100kHz : \pm 1.5dB |
| Tone Control | Bass (100Hz) : \pm 6 \pm 1.5dB |
| | Treble (10kHz) : \pm 6 \pm 1.5dB |
| Loudness (VR-30dB) | 100Hz : +6 \pm 1.5dB |
| | 10kHz : +4 \pm 1.5dB |
| S/N Ratio (Input Terminal Shorted)) | CD, Tuner, Video-1, 2 : 77.8dB |
| | Phono (MM) Cap-1 : 43.8dB |
| | Phono (MC) 3 ohm : 43.8dB |
| | Phono (MC) 40 ohm : 43.8dB |
| | Phono (MC) 100 ohm : 43.8dB |
| | Monitor-1, 2 (DAT-1, 2) : 77.8dB |
| Residual Noise | Volume, minimum : 88.2dB |
| Cross Talk (Pre-Out 5V=0dB, Input Terminal Shorted at 1kHz) | CD : -70dB |
| | Tuner : -70dB |
| | Video-1, 2 : -70dB |
| | Phono (MM) : -70dB |
| | Monitor-1, 2 : -70dB |
| Power Supply | 120V, 60Hz (UQ Model only) |
| | 100/120/220/240V, 50Hz (AD Model only) |
| Semiconductors | 6 IC's, 61 Transistors, 8 FETs, |
| | 18 Diodes, 11 Zener Diodes |
| Dimensions | 438 (W) \times 328 (D) \times 88 (H) mm |
| Weight | 5.5kg |

NOTE : Due to continuing product improvement, specifications and design are subject to change without notice.

Parts Locations and Disassembly Instructions

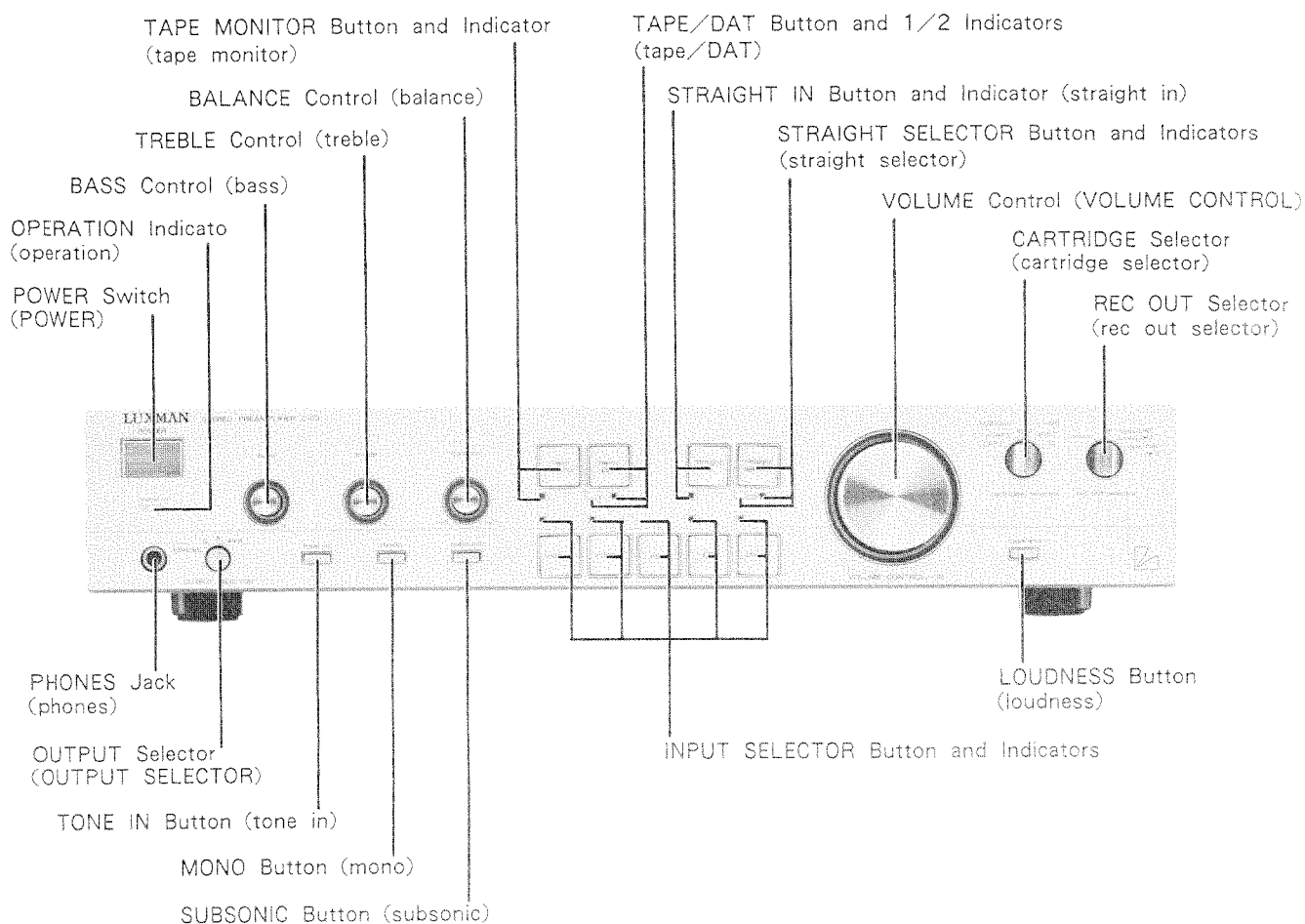


Figure 1

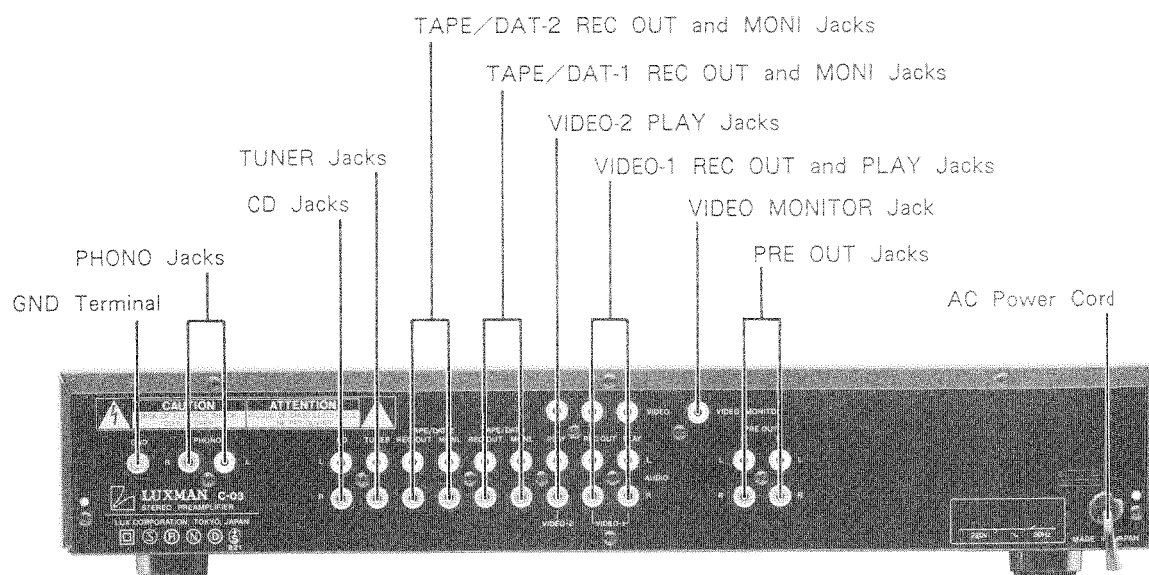


Figure 2

1. Removal of Main P. C. Board

- (1) After removal of the top cover and front panel, remove ten screws marked "O" as shown in Figure 3 and 4.

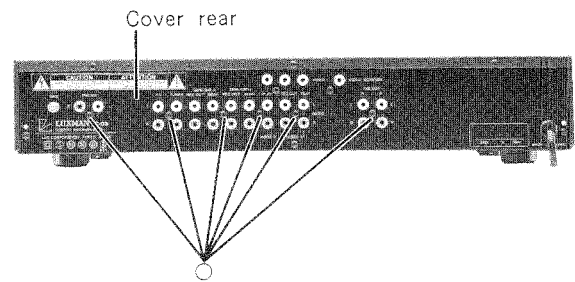
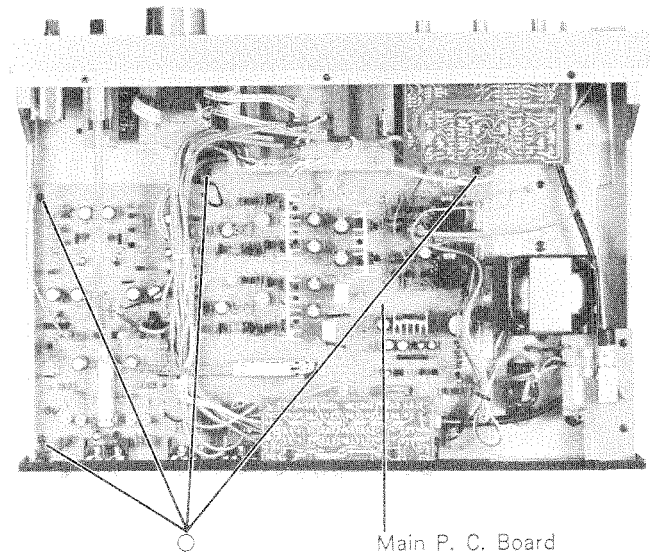


Figure 3

- (2) Remove three control knobs, (output selector/cartridge selector/rec out selector) as shown in Figure 5.



- (3) Remove three nuts as shown in Figure 5.

Figure 4

- (4) Disconnect all wires from the Main P. C. Board.

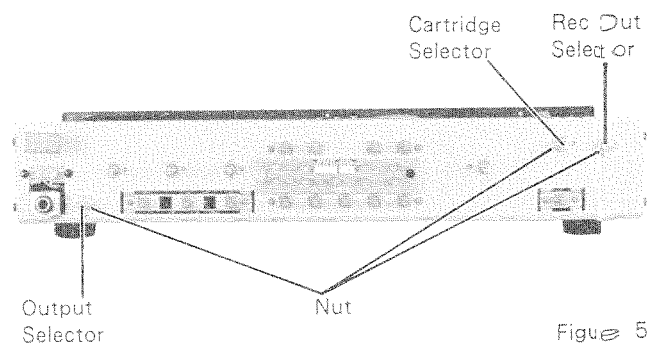
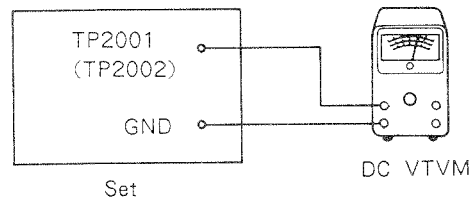


Figure 5

Adjustment Procedures

1. Connection



2. Control Settings

Treble, Bass, Balance Control Knobs
 Center Position
 Volume Control Knob Maximum
 Input Selector PHONO

Cartridge Selector Switch MM
 Others OFF

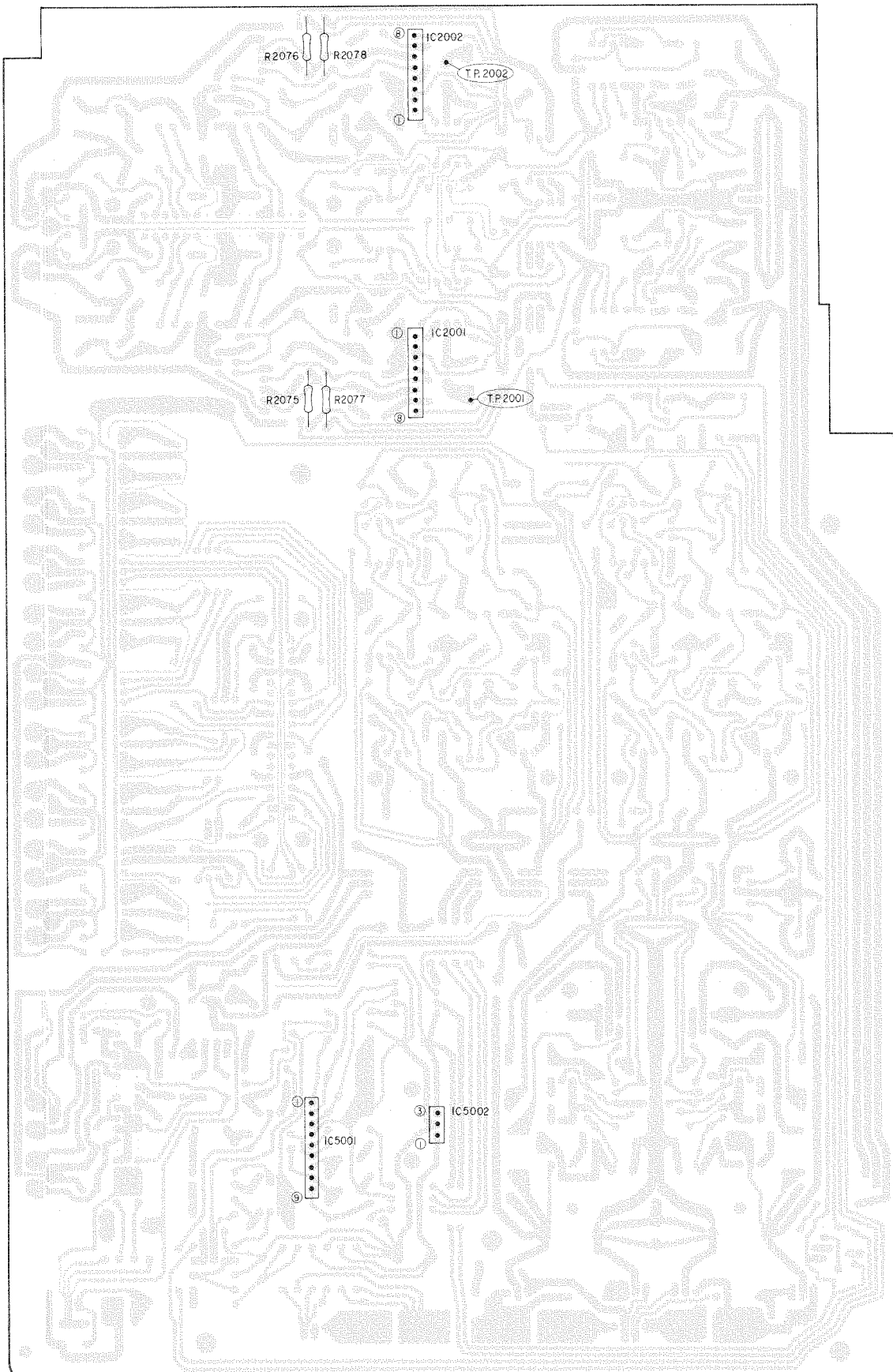
3. Adjustment Procedures

● PHONO Amp. DC Offset Adjustment

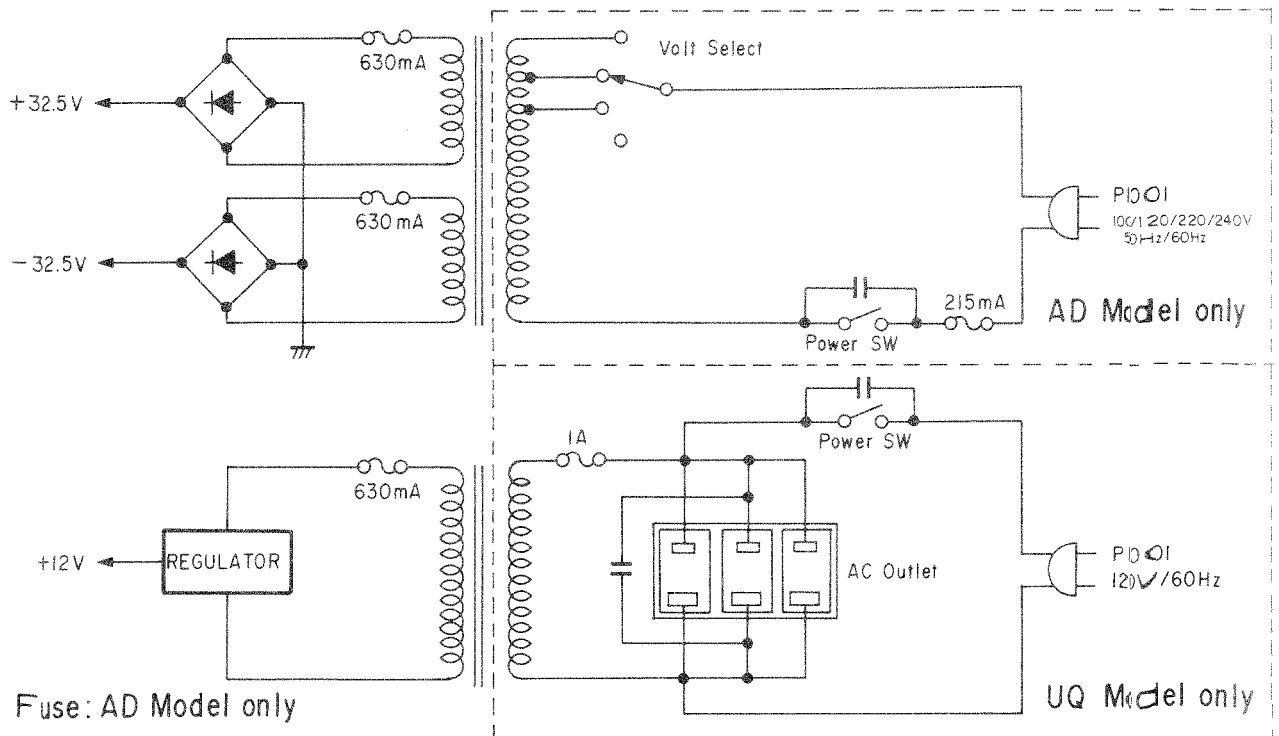
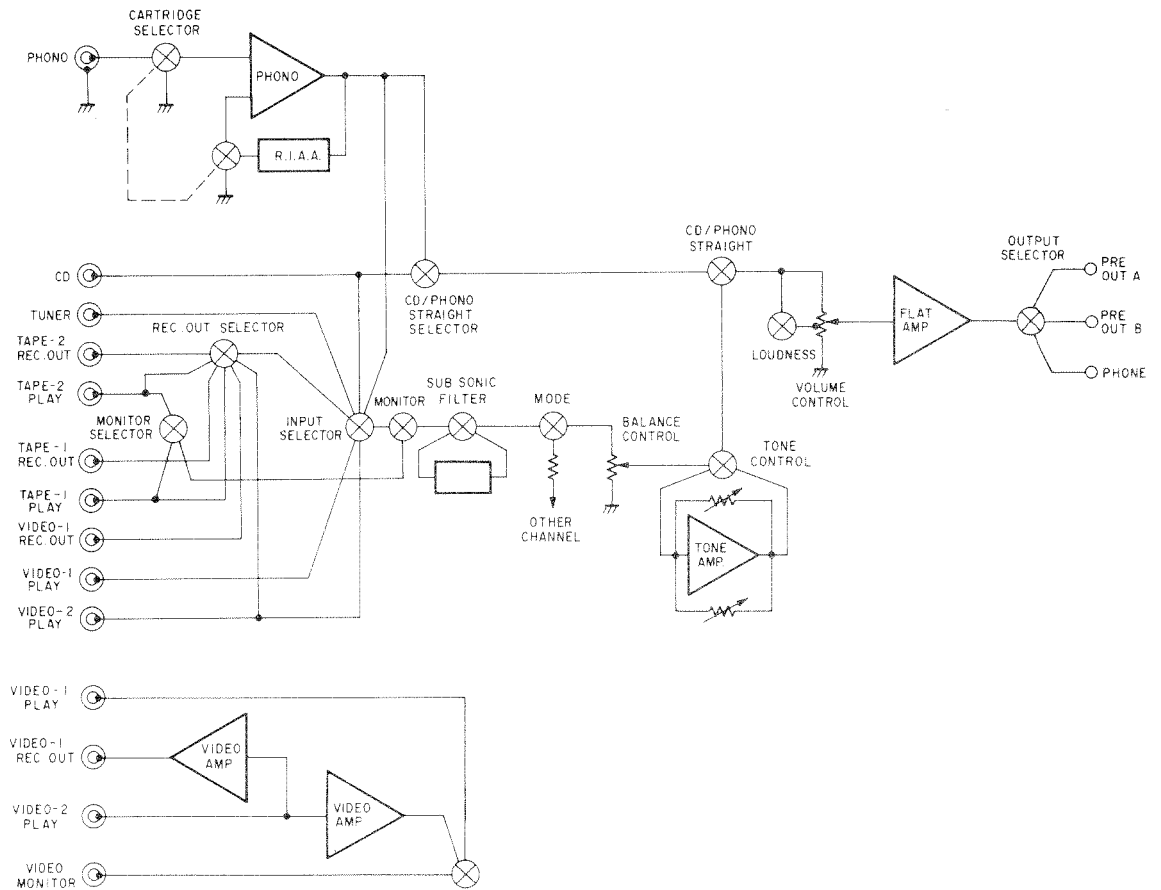
Confirm that the voltage (DC Offset Voltage) is $0 \pm 10\text{mV}$ at TP2001 (TP2002).

1. The voltage shows more than 10mV ($> +10\text{mV}$)
 Remove R2077 (R2078)
2. The voltage shows less than -10mV ($< -10\text{mV}$)
 Remove R2075 (R2076)

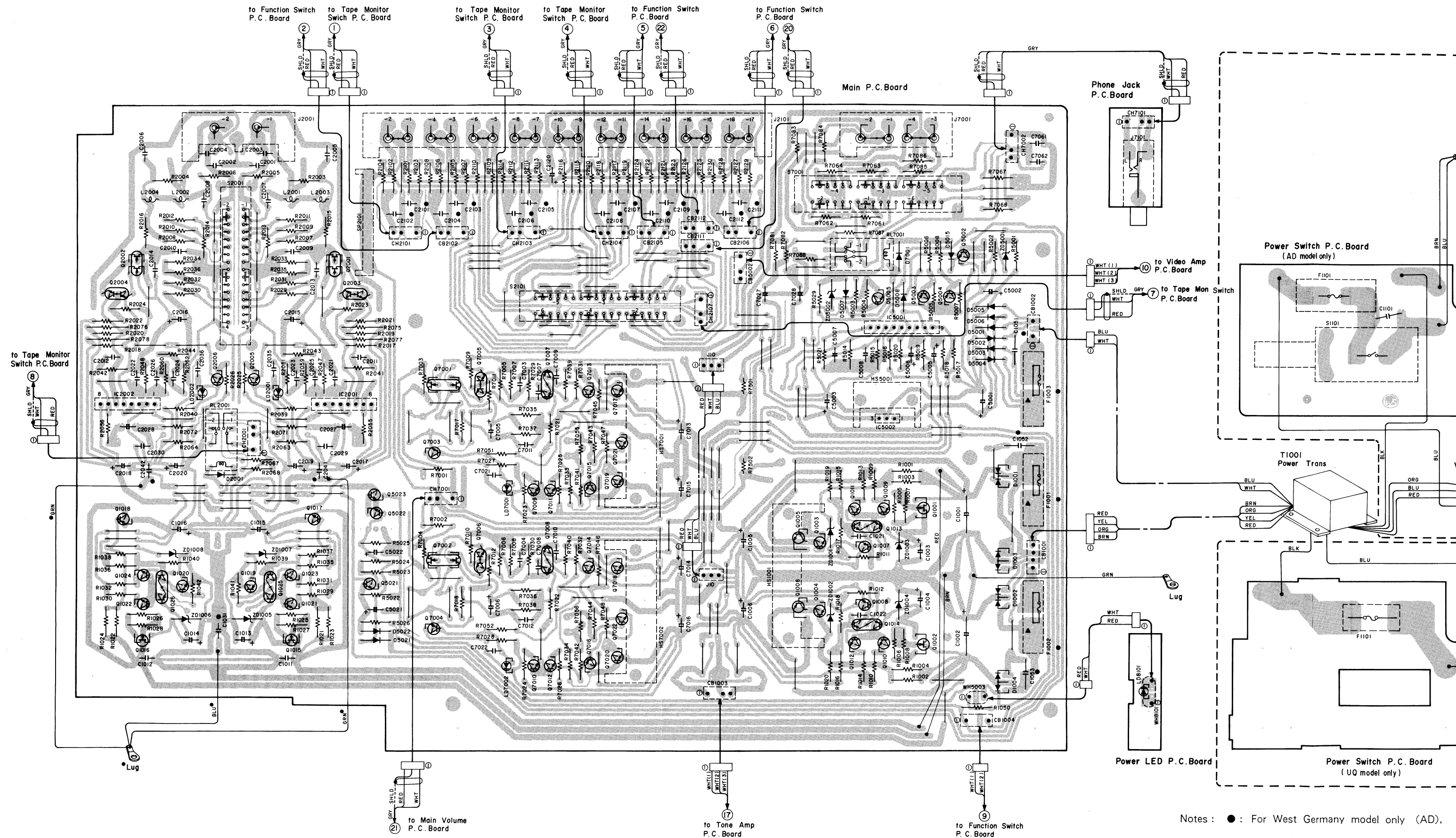
Adjustment Locations



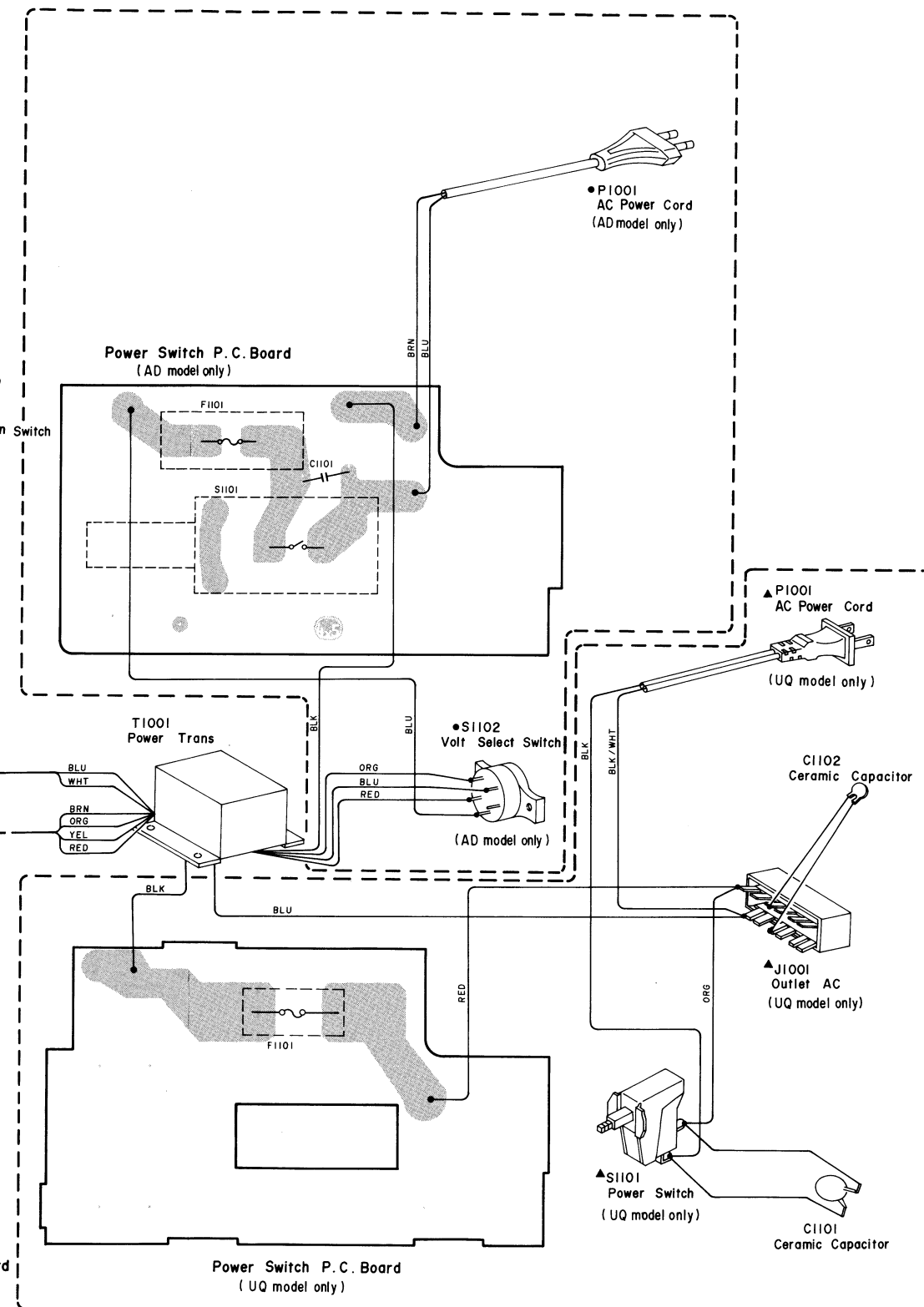
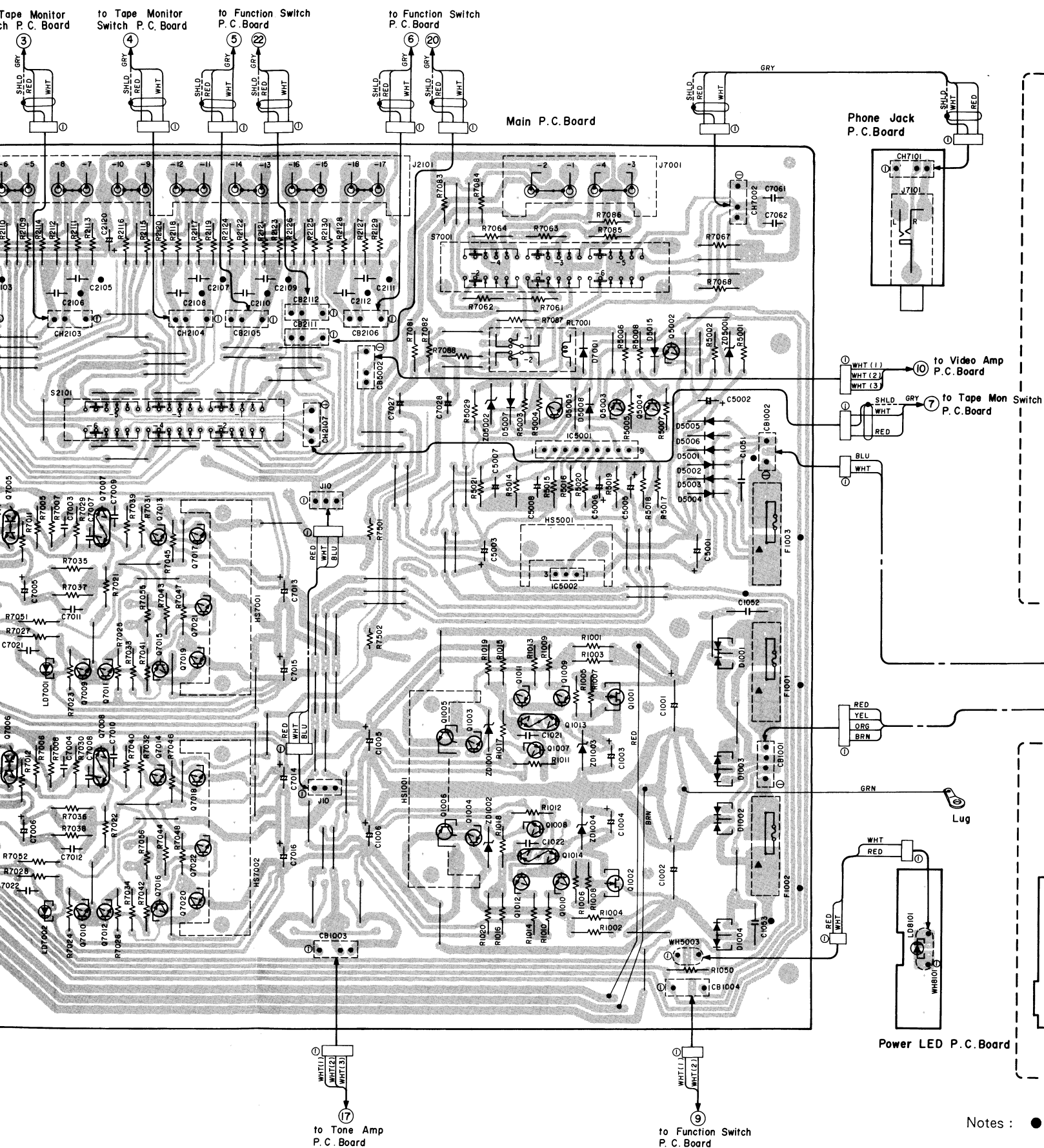
Block Diagram



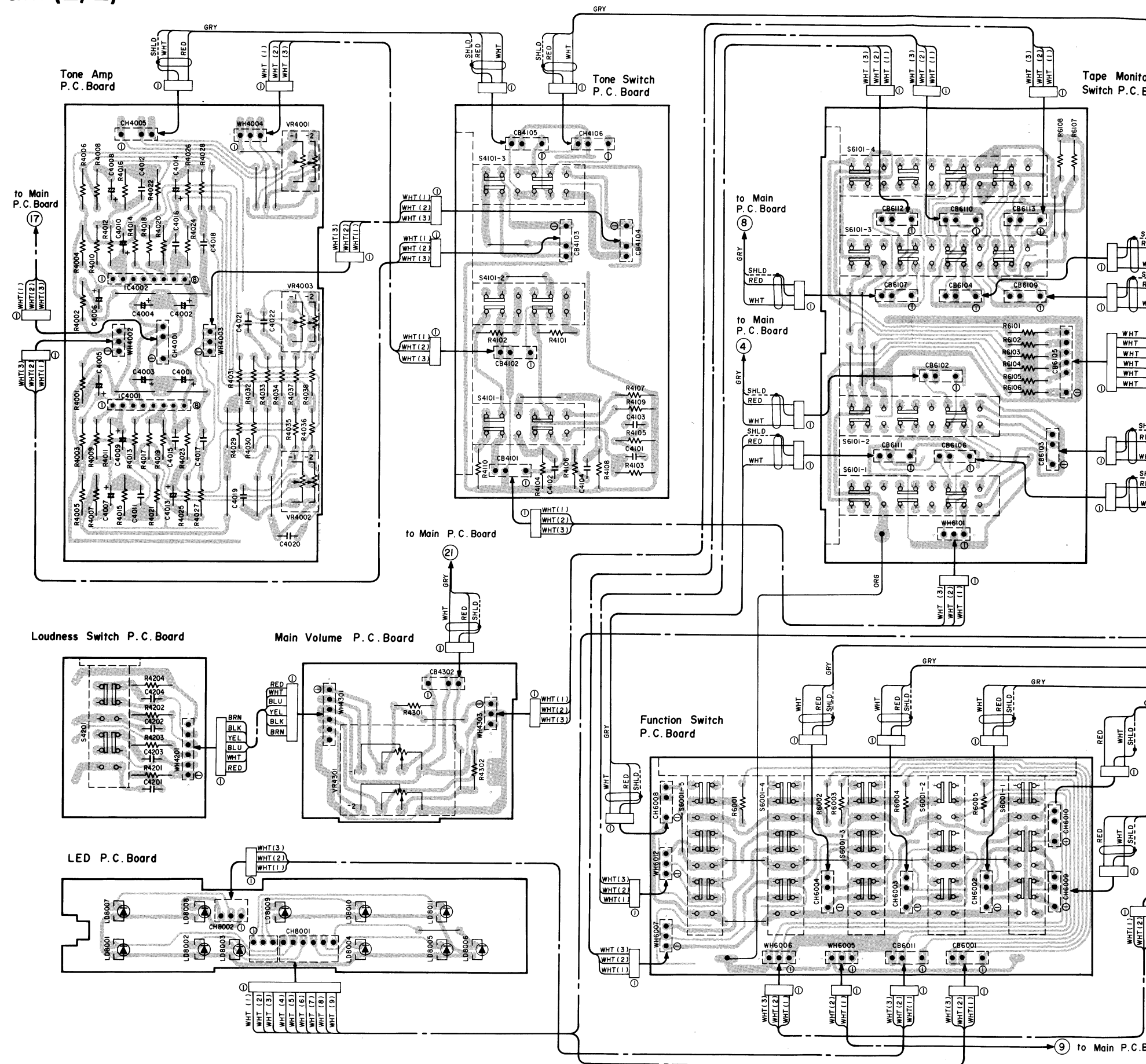
Parts Layout on P.C. Boards and Wiring Diagram (1/2)



Notes : ● : For West Germany model only (AD),

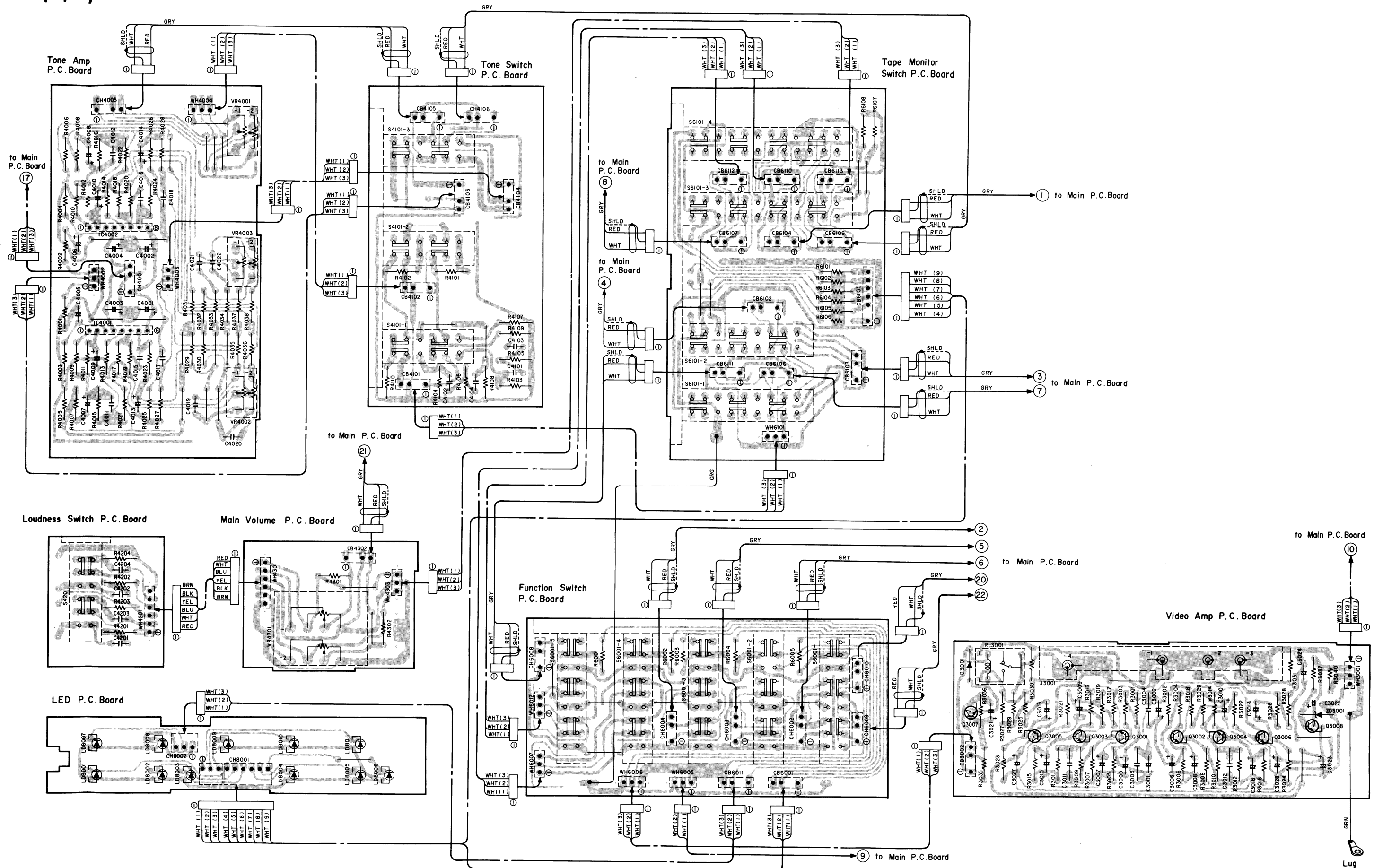


Parts Layout on P.C. Boards and Wiring Diagram (2/2)

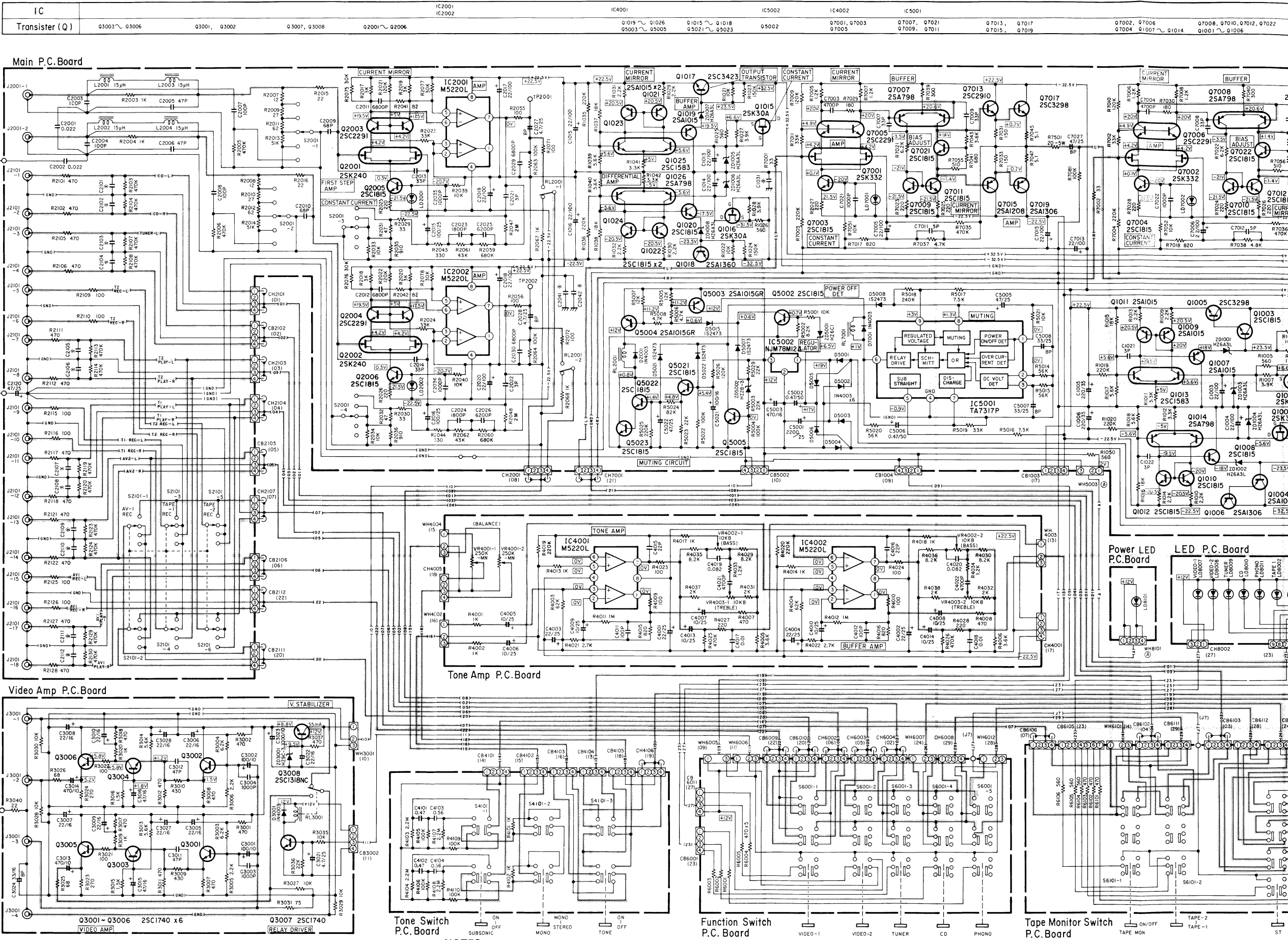


| | |
|---------|--------------|
| BLU | Blue |
| GRN | Green |
| BLK | Black |
| GRY | Gray |
| WHT | White |
| RED | Red |
| BRN | Brown |
| ORG | Orange |
| YEL | Yellow |
| VIO | Violet |
| PNK | Pink |
| GRN/WHT | Green/White |
| GRY/WHT | Gray/White |
| GRY/YEL | Gray/Yellow |
| GRN/YEL | Green/Yellow |
| SHLD | Shield |

Diagram (2/2)

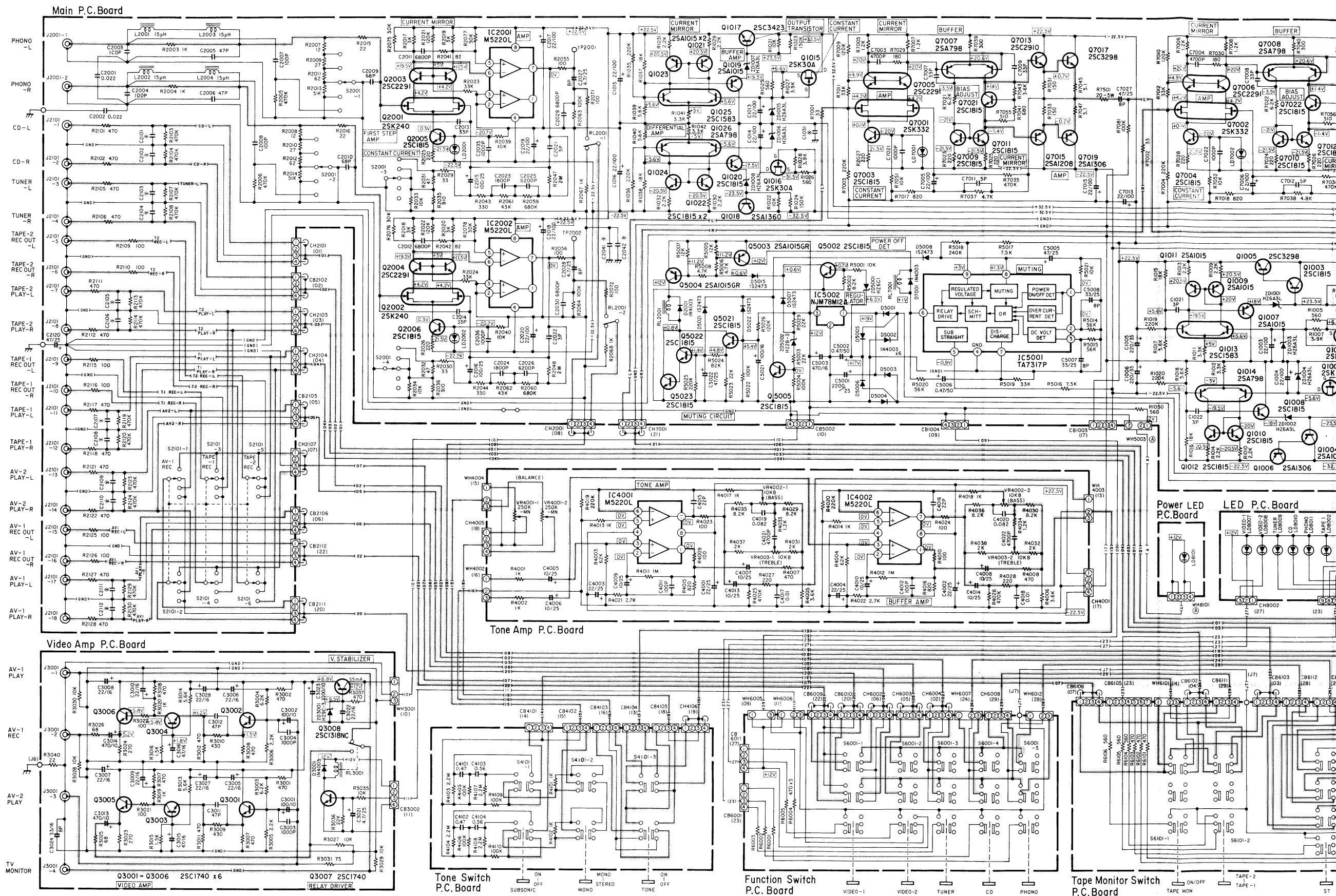


Schematic Diagram



Schematic Diagram

| IC | IC2001 IC2002 | | | | IC4001 | | IC5002 | IC4002 | IC5001 | | | |
|----------------|------------------|--------------|--------------|---------------|--------------------------------|--------------------------------|--------|-----------------------|------------------------------|------------------------------|--------------------------------------|---|
| Transister (Q) | Q3003 ~ Q3006 | Q3001, Q3002 | Q3007, Q3008 | Q2001 ~ Q2006 | Q1019 ~ Q1026 Q5003 ~ Q5005 | Q1015 ~ Q1018 Q5021 ~ Q5023 | Q5002 | Q7001, Q7003 Q7005 | Q7007, Q7021 Q7009, Q7011 | Q7013, Q7017 Q7015, Q7019 | Q7002, Q7006 Q7004, Q1007 ~ Q1014 | Q7008, Q7010, Q7012, Q7022 Q1001 ~ Q1006 |



NOTES:

1. All resistance values are in ohms. K = 1,000

2. All capacitance values are in microfarads. $P = \frac{1}{1,000,000}$

Electrical Parts List

Resistor : Carbon resistors under 1/4 watts are not mentioned in the parts list, please confirm them by schematic diagram.
uF=microfarads, pF=picofarads

| Abbreviations | | | | | Symbol No. | Part No. | Description | | |
|-----------------------|-------------|-------------|--|--|--------------|-------------|---------------|--|--|
| RES.=Resistor | | | | | Q1026 | 48T43816F02 | 2SA798 | | |
| C.F.=Carbon Film | | | | | Q2001 | 48T60558F01 | FET, 2SK240 | | |
| M.F.=Metal Film | | | | | Q2002 | 48T60558F01 | FET, 2SK240 | | |
| M.O.=Metal Oxide Film | | | | | Q2003 | 48T72598F01 | 2SC2291 | | |
| M.P.=Metal Plate | | | | | Q2004 | 48T72598F01 | 2SC2291 | | |
| TR.=Transistor | | | | | Q2005 | 48T81101F01 | 2SC1815 | | |
| TRANS.=Transformer | | | | | Q2006 | 48T81101F01 | 2SC1815 | | |
| CP.=Chip | | | | | Q5002 | 48T81101F01 | 2SC1815 | | |
| CAP.=Capacitor | | | | | Q5003 | 48T51118F02 | 2SA1015 | | |
| ELY.=Electrolytic | | | | | Q5004 | 48T51118F02 | 2SA1015 | | |
| CER.=Ceramic | | | | | Q5005 | 48T81101F01 | 2SC1815 | | |
| MYL.=Mylar | | | | | Q5021 | 48T81101F01 | 2SC1815 | | |
| TAN.=Tantalum | | | | | Q5022 | 48T81101F01 | 2SC1815 | | |
| POLY.=Polystyrol | | | | | Q5023 | 48T81101F01 | 2SC1815 | | |
| PP.=Polypropylene | | | | | Q7001 | 48T72887F01 | FET, 2SK332 | | |
| PLT.=Polyethylene | | | | | Q7002 | 48T72887F01 | FET, 2SK332 | | |
| Symbol No. | Part No. | Description | | | Q7003 | 48T81101F01 | 2SC1815 | | |
| Main P. C. Board | | | | | Q7004 | 48T81101F01 | 2SC1815 | | |
| IC's | | | | | Q7005 | 48T72598F01 | 2SC2291 | | |
| IC2001 | 51T72167F01 | M5220L | | | Q7006 | 48T72598F01 | 2SC2291 | | |
| IC2002 | 51T72167F01 | M5220L | | | Q7007 | 48T43816F02 | 2SA798 | | |
| IC5001 | 51T67437F01 | TA7317P | | | Q7008 | 48T43816F02 | 2SA798 | | |
| IC5002 | 51T72375F01 | NJM78M12A | | | Q7009 | 48T81101F01 | 2SC1815 | | |
| Transistors | | | | | Q7010 | 48T81101F01 | 2SC1815 | | |
| Q1001 | 48T52152F01 | FET, 2SK30A | | | Q7011 | 48T81101F01 | 2SC1815 | | |
| Q1002 | 48T52152F01 | FET, 2SK30A | | | Q7012 | 48T81101F01 | 2SC1815 | | |
| Q1003 | 48T81101F01 | 2SC1815 | | | Q7013 | 48T72889F01 | 2SC2910 | | |
| Q1004 | 48T81102F01 | 2SA1015 | | | Q7014 | 48T72889F01 | 2SC2910 | | |
| Q1005 | 48T60555F01 | 2SC3298 | | | Q7015 | 48T72888F01 | 2SA1208 | | |
| Q1006 | 48T60556F01 | 2SA1306 | | | Q7016 | 48T72888F01 | 2SA1208 | | |
| Q1007 | 48T81102F01 | 2SA1015 | | | Q7017 | 48T60555F01 | 2SC3298 | | |
| Q1008 | 48T81101F01 | 2SC1815 | | | Q7018 | 48T60555F01 | 2SC3298 | | |
| Q1009 | 48T81102F01 | 2SA1015 | | | Q7019 | 48T60556F01 | 2SA1306 | | |
| Q1010 | 48T81101F01 | 2SC1815 | | | Q7020 | 48T60556F01 | 2SA1306 | | |
| Q1011 | 48T81102F01 | 2SA1015 | | | Q7021 | 48S43525F03 | 2SC1815 | | |
| Q1012 | 48T81101F01 | 2SC1815 | | | Q7022 | 48S43525F03 | 2SC1815 | | |
| Q1013 | 48T44982P01 | 2SC1583G | | | Diodes/LED's | | | | |
| Q1014 | 48T43816F02 | 2SA798 | | | D1001 | 48T80317F01 | Twin D5KC20H | | |
| Q1015 | 48T52152F01 | FET, 2SK30A | | | D1002 | 48T80317F01 | Twin D5KC20H | | |
| Q1016 | 48T52152F01 | FET, 2SK30A | | | D1003 | 48T80317F02 | Twin D5KC20RH | | |
| Q1017 | 48T64376F01 | 2SC3423 | | | D1004 | 48T80317F02 | Twin D5KC20RH | | |
| Q1018 | 48T64375F01 | 2SA1360 | | | D2001 | 48S40477U01 | IN4003 | | |
| Q1019 | 48T81102F01 | 2SA1015 | | | | | | | |
| Q1020 | 48T81101F01 | 2SC1815 | | | | | | | |
| Q1021 | 48T81102F01 | 2SA1015 | | | | | | | |
| Q1022 | 48T81101F01 | 2SC1815 | | | | | | | |
| Q1023 | 48T81102F01 | 2SA1015 | | | | | | | |
| Q1024 | 48T81101F01 | 2SC1815 | | | | | | | |
| Q1025 | 48T44982P01 | 2SC1583G | | | | | | | |

| Symbol No. | Part No. | Description | | | Symbol No. | Part No. | Description | | |
|------------|-------------|--------------------|--|--|------------|-------------|--------------------------------------|--|--|
| D5001 | 48S40477U01 | IN4003 | | | Switches | | | | |
| D5002 | 48S40477U01 | IN4003 | | | S2001 | 40T90662F02 | Rotary SLD SSSR (CARTRIDGE SELECTOR) | | |
| D5003 | 48S40477U01 | IN4003 | | | S2101 | 40T90663F01 | Rotary SLD SSSR (REC OUT SELECTOR) | | |
| D5004 | 48S40477U01 | IN4003 | | | S7001 | 40T90663F01 | Rotary SLD SSSR (OUTPUT SELECTOR) | | |
| D5005 | 48S40477U01 | IN4003 | | | Jacks | | | | |
| D5006 | 48S40477U01 | IN4003 | | | J2001 | 09T90669F01 | Phono, Plate (AU) (2P) | | |
| D5007 | 48T68764F03 | 1S2473 | | | J2101 | 09T90670F01 | Phono, Plate (AU) (18P) | | |
| or | 48T43189F01 | 1S1555 | | | J7001 | 09T90672F02 | Phono, Plate (AU) (4P) | | |
| D5008 | 48T68764F03 | 1S2473 | | | Capacitors | | | | |
| or | 48T43189F01 | 1S1555 | | | C1001 | 23T00142L22 | ELY., 3300 μ F/50V | | |
| D5015 | 48T68764F03 | 1S2473 | | | C1002 | 23T00142L22 | ELY., 3300 μ F/50V | | |
| or | 48T43189F01 | 1S1555 | | | C1003 | 23T00154L53 | ELY., 22 μ F/100V | | |
| D5021 | 48T68764F03 | 1S2473 | | | C1004 | 23T00154L53 | ELY., 22 μ F/100V | | |
| or | 48T43189F01 | 1S1555 | | | C1005 | 23T00154L27 | ELY., 220 μ F/35V | | |
| D5022 | 48T68764F03 | 1S2473 | | | C1006 | 23T00154L27 | ELY., 220 μ F/35V | | |
| or | 48T43189F01 | 1S1555 | | | C1011 | 08T57705F25 | MYL., 0.047 μ F | | |
| D7001 | 48S40477U01 | IN4003 | | | C1012 | 08T57705F25 | MYL., 0.047 μ F | | |
| LD2001 | 48T52953F03 | LED, BR5507S (RED) | | | C1013 | 23T00154L53 | ELY., 22 μ F/100V | | |
| LD2002 | 48T52953F03 | LED, BR5507S (RED) | | | C1014 | 23T00154L53 | ELY., 22 μ F/100V | | |
| LD7001 | 48T52953F03 | LED, BR5507S (RED) | | | C1015 | 23T00154L53 | ELY., 22 μ F/100V | | |
| LD7002 | 48T52953F03 | LED, BR5507S (RED) | | | C1016 | 23T00154L53 | ELY., 22 μ F/100V | | |
| ZD1001 | 48T52741F03 | Zener, HZ6A-3L | | | C1021 | 08T81196F03 | MIC., 3pF | | |
| ZD1002 | 48T52741F03 | Zener, HZ6A-3L | | | C1022 | 08T81196F03 | MIC., 3pF | | |
| ZD1003 | 48T52741F03 | Zener, HZ6A-3L | | | ● C1031 | 08T52714F17 | CER., 0.022 μ F | | |
| ZD1004 | 48T52741F03 | Zener, HZ6A-3L | | | ● C1051 | 21T68834F01 | CER., 0.01 μ F | | |
| ZD1005 | 48T52741F03 | Zener, HZ6A-3L | | | ● C1052 | 21T68834F01 | CER., 0.01 μ F | | |
| ZD1006 | 48T52741F03 | Zener, HZ6A-3L | | | ● C1053 | 21T68834F01 | CER., 0.01 μ F | | |
| ZD1007 | 48T52741F03 | Zener, HZ6A-3L | | | C2001 | 08T52714F17 | CER., 0.022 μ F | | |
| ZD1008 | 48T52741F03 | Zener, HZ6A-3L | | | C2002 | 08T52714F17 | CER., 0.022 μ F | | |
| ZD5001 | 48T52739F40 | Zener, HZ6C-1 | | | C2003 | 08T61642F27 | MIC., 100pF | | |
| ZD5002 | 48T52739F03 | Zener, HZ2B-3 | | | C2004 | 08T61642F27 | MIC., 100pF | | |
| Coils | | | | | C2005 | 08T81196F25 | MIC., 47pF | | |
| L2001 | 24T63929F17 | Choke, 15 μ H | | | C2006 | 08T81196F25 | MIC., 47pF | | |
| L2002 | 24T63929F17 | Choke, 15 μ H | | | C2007 | 08T81196F34 | MIC., 100pF | | |
| L2003 | 24T63929F17 | Choke, 15 μ H | | | | | | | |
| L2004 | 24T63929F17 | Choke, 15 μ H | | | | | | | |
| Relays | | | | | | | | | |
| RL2001 | 80T00048L02 | RZ-12W-OH | | | | | | | |
| RL7001 | 80T00048L02 | RZ-12W-OH | | | | | | | |

Notes : ● : For West Germany model only (AD), ▲ : For Canadian model only (UQ), Others : Common.

| Symbol No. | Part No. | Description | | | Symbol No. | Part No. | Description | | |
|------------|-------------|---------------------------------|--|--|------------|-------------|--------------------------------|--|--|
| C2008 | 08T81196F34 | MIC., 100pF | | | C5007 | 23T00140L25 | ELY., (B.P.) 33 μ F/25V | | |
| C2009 | 08T81196F30 | MIC., 68pF | | | C5008 | 23T00140L25 | ELY., (B.P.) 33 μ F/25V | | |
| C2010 | 08T81196F30 | MIC., 68pF | | | C5021 | 23T00138L21 | ELY., 100 μ F/16V | | |
| C2011 | 08T00151L23 | PP., 6800pF | | | C5022 | 23T00138L30 | ELY., 47 μ F/25V | | |
| C2012 | 08T00151L23 | PP., 6800pF | | | C7003 | 08T00151L21 | PP., 4700p | | |
| C2013 | 08T81196F19 | MIC., 33pF | | | C7004 | 08T00151L21 | PP., 4700pF | | |
| C2014 | 08T81196F19 | MIC., 33pF | | | C7005 | 23T00132L52 | ELY., 22 μ F/100V | | |
| C2015 | 23T00132L12 | ELY., 100 μ F/25V | | | C7006 | 23T00132L52 | ELY., 22 μ F/100V | | |
| C2016 | 23T00132L12 | ELY., 100 μ F/25V | | | C7007 | 08T81196F19 | MIC., 33pF | | |
| C2017 | 23T00154L53 | ELY., 22 μ F/100V | | | C7008 | 08T81196F19 | MIC., 33pF | | |
| C2018 | 23T00154L53 | ELY., 22 μ F/100V | | | C7009 | 08T81196F19 | MIC., 33pF | | |
| C2019 | 23T00154L53 | ELY., 22 μ F/100V | | | C7010 | 08T81196F19 | MIC., 33pF | | |
| C2020 | 23T00154L53 | ELY., 22 μ F/100V | | | C7011 | 08T81196F04 | MIC., 5pF | | |
| C2021 | 08T81196F03 | MIC., 3pF | | | C7012 | 08T81196F04 | MIC., 5pF | | |
| C2022 | 08T81196F03 | MIC., 3pF | | | C7013 | 23T00154L53 | ELY., 22 μ F/100V | | |
| C2023 | 08T00151L16 | PP., 1800pF | | | C7014 | 23T00154L53 | ELY., 22 μ F/100V | | |
| C2024 | 08T00151L16 | PP., 1800pF | | | C7015 | 23T00154L53 | ELY., 22 μ F/100V | | |
| C2025 | 08T00151L72 | PP., 6200pF | | | C7016 | 23T00154L53 | ELY., 22 μ F/100V | | |
| C2026 | 08T00151L72 | PP., 6200pF | | | C7021 | 08T57705F05 | MYL., 1000pF | | |
| C2027 | 23T71210F12 | ELY., (B.P.) 4.7 μ F/25V | | | C7022 | 08T57705F05 | MYL., 1000pF | | |
| C2028 | 23T71210F12 | ELY., (B.P.) 4.7 μ F/25V | | | C7027 | 23T71210F18 | ELY., (B.P.) 47 μ F/25V | | |
| C2029 | 08T00151L23 | PP., 6800pF | | | C7028 | 23T71210F18 | ELY., (B.P.) 47 μ F/25V | | |
| C2030 | 08T00151L23 | PP., 6800pF | | | C7061 | 08T57705F13 | MYL., 4700pF | | |
| C2035 | 08T57705F05 | MYL., 1000pF | | | C7062 | 08T57705F13 | MYL., 4700pF | | |
| C2036 | 08T57705F05 | MYL., 1000pF | | | Resistors | | | | |
| ● C2041 | 08T52714F17 | CER., 0.022 μ F | | | R7501 | 06T90737F01 | M.O., 20 ohm 5W | | |
| ● C2042 | 08T52714F17 | CER., 0.022 μ F | | | R7502 | 06T90737F01 | M.O., 20 ohm 5W | | |
| ● C2101 | 08S40805F05 | CER., 470pF | | | | | | | |
| ● C2102 | 08S40805F05 | CER., 470pF | | | | | | | |
| ● C2103 | 08S40805F05 | CER., 470pF | | | | | | | |
| ● C2104 | 08S40805F05 | CER., 470pF | | | | | | | |
| ● C2105 | 08S40805F05 | CER., 470pF | | | | | | | |
| ● C2106 | 08S40805F05 | CER., 470pF | | | | | | | |
| ● C2107 | 08S40805F05 | CER., 470pF | | | | | | | |
| ● C2108 | 08S40805F05 | CER., 470pF | | | | | | | |
| ● C2109 | 08S40805F05 | CER., 470pF | | | | | | | |
| ● C2110 | 08S40805F05 | CER., 470pF | | | | | | | |
| ● C2111 | 08S40805F05 | CER., 470pF | | | | | | | |
| ● C2112 | 08S40805F05 | CER., 470pF | | | | | | | |
| C2120 | 23T00138L30 | ELY., 47 μ F/25V | | | | | | | |
| C5001 | 23T00136L47 | ELY., 2200 μ F/25V | | | | | | | |
| C5002 | 23T00138L44 | ELY., 0.47 μ F/50V | | | | | | | |
| C5003 | 23T00138L24 | ELY., 470 μ F/16V | | | | | | | |
| C5005 | 23T00138L30 | ELY., 47 μ F/25V | | | | | | | |
| C5006 | 23T00138L44 | ELY., 0.47 μ F/50V | | | | | | | |

Notes : ● : For West Germany model only (AD), ▲ : For Canadian model only (UQ), Others : Common..

| Symbol No. | Part No. | Description | | | Symbol No. | Part No. | Description | | |
|-----------------------|-------------|--------------------------------|--|--|----------------------|-------------|-----------------------------|--|--|
| Video Amp P. C. Board | | | | | Tone Amp P. C. Board | | | | |
| Transistors | | | | | IC's | | | | |
| Q3001 | 48T81103F01 | 2SC1740 | | | IC4001 | 51T72167F01 | M5220L | | |
| Q3002 | 48T81103F01 | 2SC1740 | | | IC4002 | 51T72167F01 | M5220L | | |
| Q3003 | 48T81103F01 | 2SC1740 | | | Capacitors | | | | |
| Q3004 | 48T81103F01 | 2SC1740 | | | C4001 | 23T00154L17 | ELY., 22 μ F/25V | | |
| Q3005 | 48T81103F01 | 2SC1740 | | | C4002 | 23T00154L17 | ELY., 22 μ F/25V | | |
| Q3006 | 48T81103F01 | 2SC1740 | | | C4003 | 23T00154L17 | ELY., 22 μ F/25V | | |
| Q3007 | 48T81103F01 | 2SC1740 | | | C4004 | 23T00154L17 | ELY., 22 μ F/25V | | |
| Q3008 | 48S40832F03 | 2SC1318NC | | | C4005 | 23T00138L27 | ELY., 10 μ F/25V | | |
| Diodes | | | | | C4006 | 23T00138L27 | ELY., 10 μ F/25V | | |
| D3001 | 48S40477U01 | IN4003 | | | C4007 | 23T00138L27 | ELY., 10 μ F/25V | | |
| ZD3001 | 48T52739F60 | Zener, HZ9C-3 | | | C4008 | 23T00138L27 | ELY., 10 μ F/25V | | |
| Relay/Jack | | | | | C4009 | 23T00138L27 | ELY., 10 μ F/25V | | |
| RL3001 | 80B42571P03 | Relay, (G2E) 12V | | | C4010 | 23T00138L27 | ELY., 10 μ F/25V | | |
| J3001 | 09T90671F01 | Phono, Plate (AU) 4PV | | | C4011 | 08T81196F34 | MIC., 100pF | | |
| Capacitors | | | | | C4012 | 08T81196F34 | MIC., 100pF | | |
| C3001 | 23T00138L12 | ELY., 100 μ F/10V | | | C4013 | 23T00138L27 | ELY., 10 μ F/25V | | |
| C3002 | 23T00138L12 | ELY., 100 μ F/10V | | | C4014 | 23T00138L27 | ELY., 10 μ F/25V | | |
| C3003 | 08T55260F49 | CER., 1000pF | | | C4015 | 08T81196F14 | MIC., 22pF | | |
| C3004 | 08T55260F49 | CER., 1000pF | | | C4016 | 08T81196F14 | MIC., 22pF | | |
| C3005 | 23T00138L18 | ELY., 22 μ F/16V | | | C4017 | 08T57851F01 | PF, 0.01 μ F | | |
| C3006 | 23T00138L18 | ELY., 22 μ F/16V | | | C4018 | 08T57851F01 | PF, 0.01 μ F | | |
| C3007 | 23T00138L18 | ELY., 22 μ F/16V | | | C4019 | 08T57851F12 | TF., 0.082 μ F | | |
| C3008 | 23T00138L18 | ELY., 22 μ F/16V | | | C4020 | 08T57851F12 | TF., 0.082 μ F | | |
| C3009 | 23T00138L18 | ELY., 22 μ F/16V | | | C4021 | 08T57851F32 | PF, 4700pF | | |
| C3010 | 23T00138L18 | ELY., 22 μ F/16V | | | C4022 | 08T57851F32 | PF, 4700pF | | |
| C3011 | 08T81196F25 | MIC., 47pF | | | Volumes | | | | |
| C3012 | 08T81196F25 | MIC., 47pF | | | VR4001 | 18T90658F01 | Rotary 250K ohm (BALANCE) | | |
| C3013 | 23T00138L15 | ELY., 470 μ F/10V | | | VR4002 | 18T90657F01 | Rotary 10K ohm B×2 (BASS) | | |
| C3014 | 23T00138L15 | ELY., 470 μ F/10V | | | VR4003 | 18T90657F01 | Rotary 10K ohm B×2 (TREBLE) | | |
| C3015 | 23T00138L20 | ELY., 47 μ F/16V | | | | | | | |
| C3016 | 23T00138L20 | ELY., 47 μ F/16V | | | | | | | |
| C3021 | 23T00138L26 | ELY., 4.7 μ F/25V | | | | | | | |
| C3022 | 23T00138L18 | ELY., 22 μ F/16V | | | | | | | |
| C3023 | 23T00136L20 | ELY., 1000 μ F/10V | | | | | | | |
| C3024 | 23T00140L17 | ELY., (B.P.) 33 μ F/16V | | | | | | | |
| C3027 | 23T00138L18 | ELY., 22 μ F/16V | | | | | | | |
| C3028 | 23T00138L18 | ELY., 22 μ F/16V | | | | | | | |

| Symbol No. | Part No. | Description | | | Symbol No. | Part No. | Description | | |
|---------------------------------|-------------|---|--|--|-----------------|-------------|--------------------------|--|--|
| Tone Switch P. C. Board | | | | | LED P. C. Board | | | | |
| Switch | | | | | LED's | | | | |
| S4101 | 40T90666F01 | Push (SPUN) (SUBSONIC, MONO, TONE IN) | | | LD8001 | 48T70949F01 | SLR54DC3F (ORG) | | |
| | | | | | LD8002 | 48T70949F01 | SLR54DC3F (ORG) | | |
| | | | | | LD8003 | 48T70949F01 | SLR54DC3F (ORG) | | |
| | | | | | LD8004 | 48T68847F01 | SLR-54MC3 (GRN) | | |
| | | | | | LD8005 | 48T68847F01 | SLR-54MC3 (GRN) | | |
| Capacitors | | | | | LD8006 | 48T68847F01 | SLR-54MC3 (GRN) | | |
| C4101 | 08T57851F21 | TF., 0.47 μ F | | | LD8007 | 48T68847F01 | SLR-54MC3 (GRN) | | |
| C4102 | 08T57851F21 | TF., 0.47 μ F | | | LD8008 | 48T68847F01 | SLR-54MC3 (GRN) | | |
| C4103 | 08T57851F22 | TF., 0.56 μ F | | | LD8009 | 48T68847F01 | SLR-54MC3 (GRN) | | |
| C4104 | 08T57851F22 | TF., 0.56 μ F | | | LD8010 | 48T68847F01 | SLR-54MC3 (GRN) | | |
| Loudness Switch P. C. Board | | | | | LD8011 | 48T68847F01 | SLR-54MC3 (GRN) | | |
| Switch/Capacitors | | | | | Miscellaneous | | | | |
| S4201 | 40T90667F01 | Switch, Push (SPUN) (LOUDNESS) | | | C1101 | 08T57437F11 | CAP., CER., 0.01 μ F | | |
| C4201 | 08T57705F04 | MYL., 820pF | | | ▲ C1102 | 08T57437F11 | CAP., CER., 0.01 μ F | | |
| C4202 | 08T57705F04 | MYL., 820pF | | | ● F1001 | 65T42077U14 | Fuse, Semko T630mA | | |
| C4203 | 08T57705F19 | MYL., 0.015 μ F | | | ● F1002 | 65T42077U14 | Fuse, Semko T630mA | | |
| C4204 | 08T57705F19 | MYL., 0.015 μ F | | | ● F1003 | 65T42077U14 | Fuse, Semko T630mA | | |
| Main Volume P. C. Board | | | | | ● F1101 | 65T42077U10 | Fuse, Semko T250mA | | |
| Volume | | | | | ▲ F1101 | 65T52486F03 | Fuse, MF 61NM 1A | | |
| VR4301 | 18T91013F01 | Rotary 100K ohm B×2 (VOLUME CONTROL) | | | ▲ J1001 | 09T67405F02 | Outlet, AC | | |
| Function Switch P. C. Board | | | | | J7101 | 09T66672F01 | PHONES Jack (phones) | | |
| Switch | | | | | LD8101 | 48T70949F01 | LED, SLR54DC3F (ORG) | | |
| S6001 | 40T90665F01 | Push (SPUN) (VIDEO-1, -2, TUNER, CD, PHONO) | | | ● P1001 | 28T43812P05 | AC Power Cord | | |
| Tape Monitor Switch P. C. Board | | | | | ▲ P1001 | 28T66838F01 | AC Power Cord | | |
| Switch | | | | | ● S1101 | 40T84122F01 | Switch, Power SDDLE | | |
| S6101 | 40T90668F01 | Push (SPUF) (TAPE MONITOR, TAPE/DAT, STRAIGHT IN, STRAIGHT SELECTOR) | | | ▲ S1101 | 40T80736F01 | Switch, Power SDDZB1 | | |
| | | | | | ● S1102 | 40T80258F02 | Switch, Voltage Select | | |
| | | | | | ● T1001 | 25T92778F01 | Trans, Power | | |
| | | | | | ▲ T1001 | 25T92779F01 | Trans, Power | | |

Notes : ● : For West Germany model only (AD), ▲ : For Canadian model only (UQ), Others : Common.

Cabinet Assembly Parts List

NOTE : The parts without part numbers are not supplied.

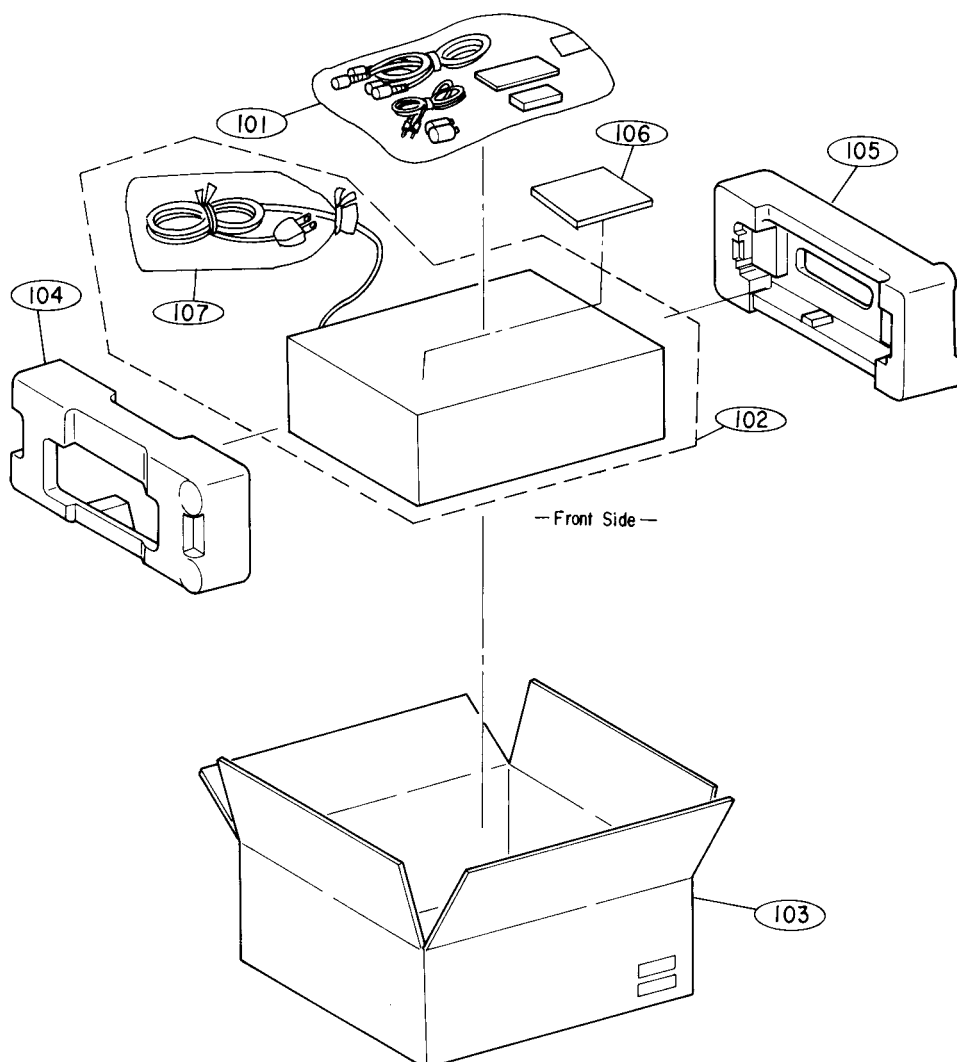
| Symbol No. | Index | Part No. | Description | | | Symbol No. | Index | Part No. | Description | | |
|------------|-------|----------|-------------|-----------------------------|--|------------|-------|----------|-------------|-----------------------|--|
| ● | 1 | 5-A | 01V91300F98 | Assy., Front P.C. Board | | | 45 | 4-B | 36A61760F01 | Knob, Rotary (VR1163) | |
| ● | 2 | 2-G | 15C83872F03 | Cover, Top | | | 46 | 3-A | 36A61435F01 | Knob, Volume (1164) | |
| ▲ | 4 | 4-F | 15C90578F01 | Cover, Rear | | | 47 | 4-C | 36B90588F01 | Knob, Rotary Volume | |
| ▲ | 4 | 4-F | 15C90578F02 | Cover, Rear | | | 48 | 3-A | 36A57910F03 | Knob, Rotary | |
| | 5 | | 03S71031F04 | Screw, Bind (M3 × 8) | | | 50 | | 03S71031F01 | Screw, Bind (M3 × 8) | |
| | 6 | | 03S82672F20 | Screw, Bind (M3 × 8) | | | 51 | 3-D | 40T90660F01 | Switch, Rotary | |
| | 7 | 5-D | 75T57059F01 | Pad, Tranleg | | | 52 | 3-D | 40T90659F01 | Switch, Rotary | |
| | 8 | 6-D | 03S63857F10 | Screw, Tapping (M4 × 12) | | | 53 | 2-A | 40T90661F01 | Switch, Rotary | |
| | 10 | | 03S44205G4Q | Screw, Bind (M3 × 4) | | | | | | | |
| | 13 | | 05B41635J02 | Rivet Push | | | | | | | |
| ● | 14 | 2-D | 14S53017F64 | Insulator, Cover | | | | | | | |
| ▲ | 14 | | 54A63397F01 | Label, Fuse Caution | | | | | | | |
| | 15 | | 03S44205G69 | Screw, Bind (M4 × 6) | | | | | | | |
| | 16 | 4-F | 75S92415F11 | Cushion, Rubber | | | | | | | |
| ● | 17 | 1-B | 47A90587F01 | Shaft, Power | | | | | | | |
| ▲ | 17 | 1-B | 47A92022F01 | Shaft, Power | | | | | | | |
| | 18 | 1-C | 43A83885F01 | Spacer, Rubber | | | | | | | |
| | 21 | | 03D40014G04 | Screw, W/Washer (M3 × 6) | | | | | | | |
| | 28 | | 43T53136F01 | Bush, Cap | | | | | | | |
| | 29 | 4-H | 43B41625J02 | Support, Cord | | | | | | | |
| | 30 | 4-H | 29T66964F02 | Terminal, GND (AU) | | | | | | | |
| ● | 31 | 5-H | 14A93742F01 | Double, Face Jack | | | | | | | |
| ● | 35 | | 09T51410F01 | Holder, Fuse (Semko) | | | | | | | |
| ▲ | 35 | 4-D | 09T51960F01 | Holder, Fuse (Semko) | | | | | | | |
| | 36 | | 29C41045P06 | Lug, Board-In 50mm | | | | | | | |
| | 37 | | 29A41814G01 | Lug | | | | | | | |
| | 41 | 4-A | 03S44205G50 | Screw, Countersink (M3 × 6) | | | | | | | |
| | 42 | 3-A | 36B70885F08 | Knob, Push (Power) | | | | | | | |
| | 43 | | 36A67333F02 | Knob, Push (3 × 10) | | | | | | | |
| | 44 | 4-A | 36R61696F01 | Knob, Main (1163 Metal) | | | | | | | |

Notes : ● : For West Germany model only (AD), ▲ : For Canadian model only (UQ), Others : Common.

Packing Assembly Parts List

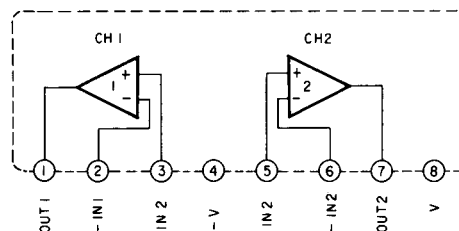
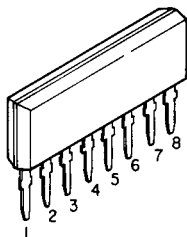
| Symbol No. | Part No. | Description | | | Symbol No. | Part No. | Description | | |
|------------|-------------|------------------------|--|--|------------|-------------|--------------------|--|--|
| 101-1 | 68P83710F05 | Owners Manual | | | 105 | 56D90649F01 | Tray, Packing | | |
| 101-2 | 28T67347F01 | Plug, Audio Cable (AU) | | | 106 | 56A93246F01 | Pad, Packing | | |
| 102 | 56B40230G23 | Sack, Polyethylene | | | 107 | 56B40230G08 | Sack, Polyethylene | | |
| 103 | 56S83833F14 | Carton, Packing | | | | | | | |
| 104 | 56D90648F01 | Tray, Packing | | | | | | | |

Packing Method View

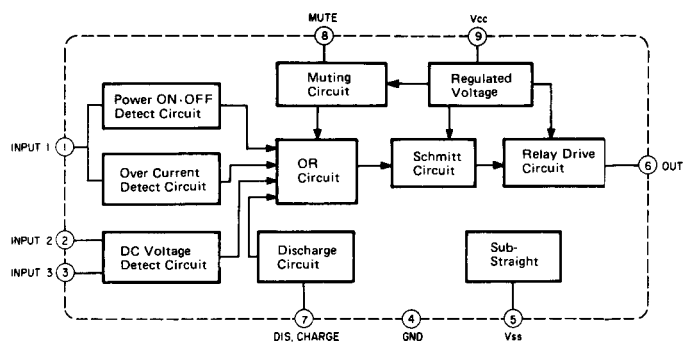
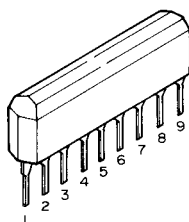


Semi-Conductor Lead Identifications

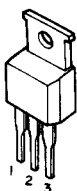
M5220L : IC2001, 2002, 4001, 4002



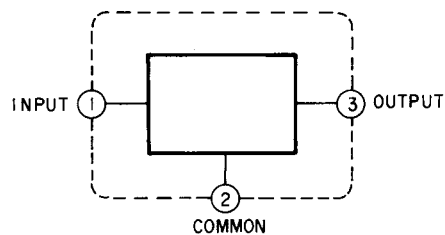
TA7317P : IC5001



NJM78M12A : IC5002



1: INPUT
2: COMMON
3: OUTPUT



2SK30A : Q1001, 1002, 1015, 1016

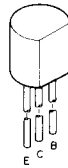


2SC1815 : Q1003, 1008, 1010, 1012, 1020, 1022, 1024, 2005, 2006, 5002, 5005
 : Q5021, 5022, 5023, 7003, 7004, 7009, 7010, 7011, 7012, 7021, 7022

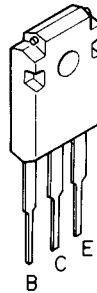
2SA1015 : Q1004, 1007, 1009, 1011, 1019, 1021, 1023, 5003, 5004

2SC1740 : Q3001, 3002, 3003, 3004, 3005, 3006, 3007

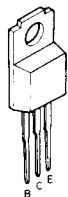
2SC1318NC : Q3008



2SC3298 : Q1005, 7017, 7018

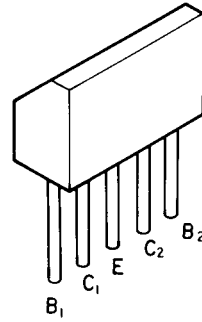


2SA1306 : Q1006, 7019, 7020



2SA798 : Q1014, 1026, 7007, 7008

2SC1583 : Q1013, 1025

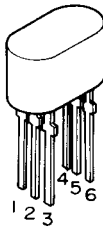


2SC3423 : Q1017

2SA1360 : Q1018

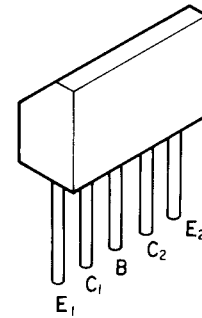


2SK240 : Q2001, 2002

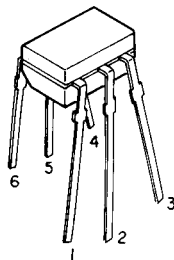


1: DRAIN 1
2: GATE 1
3: SOURCE 1
4: DRAIN 2
5: GATE 2
6: SOURCE 2

2SC2291 : Q2003, 2004, 7005, 7006



2SK332 : Q7001, 7002



1: DRAIN 1
2: GATE 1
3: SOURCE 1
4: SOURCE 2
5: GATE 2
6: DRAIN 2

2SA1208 : Q7015, 7016

2SC2910 : Q7013, 7014

